

**REMARKS**

Claims 1-12 are pending in the present application. Claims 8-12 are withdrawn from consideration. Claims 1-7 are rejected. Claim 3 is herein canceled. Claim 1 is herein amended. No new claims are added and no new matter has been entered. In light of the aforementioned amendments and following remarks, Applicants earnestly solicit favorable consideration.

As a preliminary matter, Applicants note that the Examiner has changed the rationale for the rejection of claim 1. That is, the Examiner now contends that the “second passage” as recited in claim 1 is not disclosed by reference character 268 (as indicated in the office action dated March 20, 2008), but instead contends it is disclosed by the reference character labeled 777. The Examiner submits that the Office Action should be made final because the Examiner made a typographical mistake in the rejection and that Applicants could have recognized this.

Applicants respectfully disagree. Applicants should not be adversely affected by way of a final office action due to an inadvertent error by the Examiner. Applicants regret the extended prosecution of the application, but Applicants should not be harmed by said typographical error. As the Examiner’s rejection was fairly interpreted for what it recited, and Applicants responded on the merits to the Examiner’s assertion, making the rejection final would unfairly harm Applicants.

Also, because the rejection was an obviousness type, Applicants are not required to address every possible interpretation of the reference, only the interpretation presented by the

Examiner. If Applicants were required to address every possible interpretation, it would be extremely burdensome and inefficient, hampering prosecution of the application.

Additionally, as Applicants did not present any substantive amendments which necessitated a new search, Applicants respectfully submit that the Examiner should have issued a non-final office action. That is, Applicants successfully traversed the Examiner's rejection such that the Examiner changed his interpretation of the references under 35 U.S.C. § 103. As such, Applicants are entitled to a non-final office action.

## **On the Merits**

### Claim Rejections - 35 U.S.C. § 103

Claims 1, 2, 4 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Roberts et al.* (US Pub. 2001/0055707 A1) in view of *Barton et al.* (US Pub. 2003/0022041 A1), hereinafter referred to as *Roberts* and *Barton*, respectively.

### Independent Claim 1:

Independent claim 1 requires in part:

- <sup>1</sup>a first passage connecting the fuel battery to a purge gas supply source;
- <sup>2</sup>a second passage connecting the fuel battery to an exterior;
- <sup>3</sup>a first solenoid valve installed in the second passage;
- <sup>4</sup>a current sensor producing an output indicative of current generated by the fuel battery; and
- <sup>5</sup>an electronic control unit that opens the first and second solenoid valves to open the first and second passages to supply the purge gas to the fuel battery through the first

passage such that residue in the fuel battery is purged to the exterior through the second passage by the purge gas, at a time interval determined from the output of the current sensor, further including:

<sup>6</sup>a hydrogen sensor installed in the second passage at a position located downstream of the ejector and producing an output indicating that hydrogen gas flows into the second passage at a position located downstream of the ejector; and

<sup>7</sup>the electronic control unit terminates purging of the residue when it is detected that the hydrogen gas flows into the second passage at a position located downstream of the ejector from the output of the hydrogen sensor.

As noted on page 4 of the office action, the Examiner considers the second passage to be disclosed by conduit 777. This is noted on page 5 of the office action which shows reference character 777 handwritten into figure 3 of *Robert*, by the Examiner.

In order to expedite prosecution of the application, Applicants have amend claim 1 to recite the language of a “connection through an ejector” of the second passage to the fuel battery. This feature is not disclosed or fairly suggested by the references. *Roberts* shows in FIG. 3 that the alleged second passage is connected to a reservoir 232, and not directly connected to fuel cell stack 210.

That is, *Tsutomu* discloses, as shown in FIG. 1, the purge system having hydrogen sensor 44 installed in a circulating passage (12), and conducting a purge when hydrogen sensor 44 detects a descent of hydrogen in the circulating passage (12). However, *Tsutomu* does not disclose a hydrogen sensor installed in a downstream of an ejector (purge valve 41).

As indicated above, Applicants have also included the features of dependent claim 3 into independent claim 1. Regarding the new features of claim 1 (formerly of claim 3), the Examiner acknowledges that the features are not disclosed in *Roberts* or *Barton*, but instead contends it is

disclosed in *Tsutomu* (JP 2000-243417). The Examiner points to paragraph [0026] and hydrogen sensor 44 to allegedly disclose the recited features.

While reference character 44 does appear to be a hydrogen sensor, *Tsutomu* does not disclose the terminating of the purge when hydrogen is detected in the sensor. Thus, the features of claim 1 are not disclosed or fairly suggested by the cited references.

As such, Applicants respectfully submit that claim 1 is presently in condition for allowance. Applicants ask the Examiner to withdraw the rejection.

Dependent Claim 2:

Dependent claim 2 recites that the time interval of the purge is shorter with increasing output of the current sensor. The Examiner contends that *Barton* discloses that a microcontroller can be programmed to any predefined purge duration based on the input from the current sensor.

Applicants respectfully traverse this rejection. Having a purge duration based on the “stack current” does not disclose or fairly suggest increasing the purge time interval with an increasing output of the current sensor. As such, Applicants ask the Examiner to withdraw the rejection of claim 2 and allow the claim.

Dependent Claims 5 and 6:

Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Roberts* in view of *Barton* as applied in claim 4 and further in view of *Nobobe* (US Pub.

Application No.: 10/849,371  
Art Unit: 1795

Amendment under 37 C.F.R. §1.116  
Attorney Docket No.: 042421

2002/0192520 A1). As claims 5 and 6 each ultimately depend from claim 1, the arguments presented above regarding claim 1 also apply to its dependent claims.

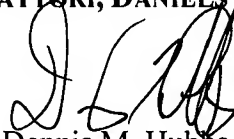
In view of the aforementioned amendments and accompanying remarks, Applicants submit that the application is in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

**WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP**



Dennis M. Hubbs

Attorney for Applicants

Registration No. 59,145

Telephone: (202) 822-1100

Facsimile: (202) 822-1111

DMD/jac